AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method for improving the efficacy and/or transdermal transport of topically administered pharmaceuticals and pharmacologically active compounds, said method comprising the step of incorporating the pharmaceutical or pharmacologically active compound in a carrier comprising an effective amount of one or more complexes of a ~~phosphate~~ phosphorylated ~~derivative of a~~ lipophilic pharmaceutically acceptable compound[[.]] ;

wherein the lipophilic pharmaceutically acceptable compound is selected from the group consisting of tocopherol, vitamin A (retinol), vitamin K (menadione), tocotrienols, vitamin D (calciferol) and mixtures thereof; and

wherein the complex of a phosphorylated lipophilic pharmaceutically acceptable compound is prepared from a complexing agent selected from the group consisting of arginine, and a substituted amine surfactant of the following formula:

$NR^1R^2R^3$

wherein R^1 is chosen from the group consisting of straight or branched chain mixed alkyl radicals from C6 to C22 and carbonyl derivatives thereof, and R^2 and R^3 are chosen independently from the group consisting of –H, $-CH_2(CO)OX$, $-CH_2CH(OH)CH_2SO_3X$, $-CH_2CH(OH)CH_2OPO_3X_2$, $-CH_2CH_2(CO)OX$, $-CH_2CH_2CH(OH)CH_2SO_3X$, and $-CH_2CH_2CH(OH)CH_2OPO_3X_2$, wherein X is H, Na, K or alkanolamine provided R^2 and R^3 are not both H.

2. – 3. (Cancelled)

4. (Currently Amended) The method according to claim 1, ~~any one of the preceding claims~~ wherein the phosphate derivative of a lipophilic pharmaceutically acceptable compound is selected from the group consisting of monophosphates of the lipophilic pharmaceutically acceptable compound, diphosphates of the lipophilic pharmaceutically acceptable compound, and mixtures thereof.

5. (Currently Amended) The method according to claim 1, ~~any one of the preceding claims~~ wherein the effective amount of the one or more complexes of the a phosphate derivative of the a lipophilic pharmaceutically acceptable compound is in the range from 1 to 90% w/w of the total weight of the carrier.

6. (Currently Amended) The method according to claim 5 wherein the effective amount is

in the range from 40 to 90% w/w of the total weight of the carrier.

7. (Currently Amended) The method according to claim 6 wherein the effective amount is in the range from 45 to 75 % w/w of the total weight of the carrier. ~~and~~

8. (Currently Amended) The method according to claim 7 wherein the effective amount is in the range from 50 to 60% w/w of the total weight of the carrier.

9. (Currently Amended) The method according to claim 5 wherein the effective amount is in the range from 1 to 15 ~~1 to 10~~ % w/w of the total weight of the carrier.

10. (Currently Amended) The method according to claim 5 ~~9~~ wherein the effective amount is in the range from 1 to 10 ~~1 to 15~~% w/w of the total weight of the carrier.

11. (Currently Amended) The method according to claim 10 wherein the effective amount is in the range from 5 to 10% w/w of the total weight of the carrier.

12. (Currently Amended) The method according to claim 1, ~~any one of the preceding claims~~ wherein the one or more complexes of the ~~a~~ phosphate derivative of the ~~a~~ lipophilic pharmaceutically acceptable compound are ~~is~~ selected from the group consisting of one or more complexes of phosphate derivatives of tocopherol, and mixtures thereof.

13. (Currently Amended) The method according to claim 12 wherein the one or more complexes of the ~~a~~ phosphate derivative of the ~~a~~ lipophilic pharmaceutically acceptable compound is selected from the group consisting of laurylaminodipropionic acid tocopheryl monophosphate, laurylaminodipropionic acid tocopheryl diphosphate, and mixtures thereof.

14. (Currently Amended) The method according to claim 13, ~~either of claims 12 or 13~~ wherein the effective amount of the one or more complexes of phosphate derivatives of tocopherol is in the range of from 0.1 to 10% [[(]]w/w[[)]] of the total weight of the carrier.

15. (Currently Amended) The method according to claim 14 wherein the effective amount is in the range from 5 to 10% w/w of the total weight of the carrier.

16. (Currently Amended) The method according to claim 15 wherein the effective amount is about 7.5% w/w of the total weight of the carrier.

17. (Currently Amended) The method according to claim 1, ~~any one of the preceding claims~~ wherein the carrier further comprises excipients ~~are~~ selected from the group consisting of solvents, surfactants, emollients, preservatives, colorants, fragrances and mixtures thereof.

18. (Original) The method according to claim 1 wherein the carrier comprises 7.50% laurylaminodipropionic acid tocopheryl phosphate, 61.95% deionized water, 5.00% glycerin, 0.05% trisodium EDTA, 0.50% carbomer (Carbopol Ultrez 10), 2.00% Phoenoxol T (cetearyl alcohol and ceteareth-20), 1.00% glyceryl stearate (Emerest 2400), 5.00% isopropyl myristate Pelemol IPM), 3.50% cetyl ethylhexanoate (Pelemol 168), 3.50% isocetyl behenate (Pelemol ICB), 3.00% oleyl. erucate (Cetiol J-600), 0.50% dimethicone (Dow 200,100 cSt.), 5.00% deionized water, 0.50% triethanolamine (99%) and 1.00% Germaben II (propylene glycol, diazolidinyl urea, methylparaben and propylparaben).

19. (Currently Amended) The method according to claim 1, ~~any one of the preceding claims~~ wherein the pharmaceutical[[s]] or ~~and~~ pharmacologically active compound[[s]] is ~~are~~ selected from the group consisting of morphine, atropine, estradiol, and testosterone.

20. (Withdrawn) A carrier when used in the topical administration of pharmaceuticals or pharmacologically active compounds, the carrier comprising an effective amount of one or more complexes of phosphate derivatives of lipophilic pharmaceutically acceptable compounds.

21. (Withdrawn) A carrier composition for use in topical administration of pharmaceuticals and pharmacologically active compounds, said carrier comprising an effective amount of one or more complexes of a phosphate derivative of a lipophilic pharmaceutically acceptable compound.

22. (Withdrawn) A pharmaceutical composition comprising one or more pharmaceuticals or pharmacologically active compounds and a carrier comprising an effective amount of one or more complexes of phosphate derivatives of lipophilic pharmaceutically acceptable compounds.

23. (Withdrawn) Use of an effective amount of one or more complexes of phosphate

derivatives of lipophilic pharmaceutically acceptable compounds together with other excipients in the manufacture of a carrier for use in the topical administration of pharmaceuticals or pharmacologically active compounds.

24. (Cancelled)

25. (Withdrawn) A carrier for use in topical administration of pharmaceuticals and pharmacologically active compounds, said carrier comprising an effective amount of one or more phosphate derivatives of a lipophilic pharmaceutically acceptable compound.

26. (New) The method of claim 1 wherein the pharmacologically active compound is selected from the group consisting of narcotic analgesics including morphine and levorphanol, non narcotic analgesics including codeine and acetominophen, corticosteroids such as cortisone, anesthetics including propofol, antiemetics including scopolamine, sympathomimetic drugs including adrenaline and dopamine, antiepileptic drugs including fosphenytoin, anti-inflammatory drugs including ibuprofen, thyroid hormones and antithyroid drugs including thyroxine, phytochemicals including α-bisabolol, eugenol, silybin, soy isoflavones, iridoid glycosides including aucubin and catapol, sesquiterpene lactones including pseudoguaianolide from *Arnica chamissonis*, terpenes including rosmarinic acid and rosmanol, phenolic glycosides including the salicylates salicin, saligenin and salicylic acid, triterpenes taxasterol or α-lactucerol, and isolactucerol, p-hydroxyphenylacetic acid derivative taraxacoside, hydroquinone derivatives including arbutin, phenylalkanones including gingerols and shagaols, hypercin, and acylphloroglucides including xanthohumol, lupulone, humulone and 2-methylbut-3-en-2-ol, or a derivative thereof.